



Chapter 16-229 WAC
Secondary and Operational Area Containment for Bulk Pesticides

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PART 1 GENERAL PROVISIONS

WAC 16-229-010 Definitions. The definitions set forth in this section shall apply throughout this chapter unless the context otherwise requires:

(1) **"Approved air gap"** means a physical separation between the free-flowing end of a water supply pipeline and the overflow rim of an open or nonpressurized receiving vessel. To be an approved air gap, the separation must be at least:

(a) Twice the diameter of the supply piping measured vertically from the overflow rim of the receiving vessel, and in no case be less than one inch, when unaffected by vertical surfaces (sidewalls); or

(b) Three times the diameter of the supply piping, if the horizontal distance between the supply pipe and a vertical surface (sidewall) is less than or equal to three times the diameter of the supply pipe, or if the horizontal distance between the supply pipe and intersecting vertical surfaces (sidewalls) is less than or equal to four times the diameter of the supply pipe and in no case less than one and one-half inches.

(2) **"Approved reduced pressure principle backflow prevention assembly (RPBA)"** means an RPBA of a make, model and size that is approved by the Washington State Department of Health.

(3) **"Appurtenances"** means all valves, pumps, fittings, pipes, hoses, metering devices, and mechanical devices which are connected to a storage container, or which are used to transfer a material into or out of such container.

(4) **"Bulk pesticide"** means any registered pesticide which is transported or held in an individual container in undivided quantities of greater than fifty-five U.S. gallons liquid measure or one hundred pounds net dry weight.

(5) **"Certified engineer"** means a licensed professional engineer, registered in the state of Washington in the discipline in which he/she is practicing.

(6) **"Department"** means the Washington state department of agriculture.

(7) "**Discharge**" means a spill, leak, or release, accidental or otherwise, from a storage container, container or appurtenance. It does not include a fully contained transfer of pesticide which is made pursuant to sale, storage, distribution or use.

(8) "**Dry pesticide**" means pesticide which is in solid form prior to any application or mixing for application, and includes formulations such as dusts, wettable powders, dry flowable powders, granules, and water dispersible granules.

(9) "**Liquid pesticide**" means pesticide in liquid form, and includes solutions, emulsions, suspensions, slurries, and pesticide rinsates.

(10) "**Mini-bulk pesticide**" means an amount of liquid pesticide greater than fifty-five gallons but not exceeding five hundred gallons which is held in a single container designed for ready handling and transport, which has been filled by the original pesticide manufacturer or repackager, and to which no substance has been added by any person.

(11) "**Not technically feasible**" means compliance is not physically or technically possible or feasible, and/or compliance cannot be achieved without compromising operational safety, and/or significantly compromising operational access. Monetary cost of compliance alone shall not be sufficient for the department to determine that compliance is not technically feasible.

(12) "**Operational area**" means an area or areas where pesticides are transferred, loaded, unloaded, mixed, repackaged, refilled or where pesticides are cleaned, or rinsed from containers or application, handling, storage or transportation equipment.

(13) "**Operational area containment**" means any structure or system designed and constructed to intercept and contain discharges, including storage container or equipment wash water, rinsates, and rainwater from the operational area(s).

(14) "**Permanent mixing/loading site**" means a site (location) at which more than three hundred gallons of liquid pesticide (formulated product) or three thousand pounds of dry pesticide or at which a total of fifteen hundred pounds of pesticides as active ingredients are being mixed, repackaged or transferred from one container to another within a calendar year: PROVIDED, That wood preservative application systems already regulated by 40 CFR, Parts 264.570-575 and Parts 265.440-445 shall be exempt.

(15) "**Permanent storage facility**" means a location at which liquid bulk pesticide in a single container or aggregate quantities in excess of five hundred U.S. gallons or dry bulk pesticide in undivided quantities in excess of two thousand pounds is held in storage: PROVIDED, That mini-bulk pesticide containers are exempt from this chapter.

(16) "**Pesticide**" means, but is not limited to:

(a) Any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, snail, slug, fungus, weed, and any other form of plant or animal life or virus, except virus on or in a living person or other animal which is normally considered to be a pest or which the director may declare to be a pest;

(b) Any substance or mixture of substances intended to be used as a plant regulator, defoliant or desiccant; and

(c) Any spray adjuvant.

(d) For the purpose of establishing permanent mixing/loading site threshold values petroleum oils are exempt from this chapter.

(17) **"Primary containment"** means the storage of liquid or dry bulk pesticide in storage containers at a permanent storage facility.

(18) **"Rinsate"** means the liquid generated from the rinsing of any equipment or container that has come in direct contact with any pesticide, including: recovered sedimentation, washwater, contaminated precipitation, or other contaminated debris.

(19) **"Secondary containment"** means a device or structure designed, constructed, and maintained to hold or confine a discharge of a liquid pesticide from a permanent storage facility.

(20) **"Storage container"** means a container, including a rail car, nurse tank or other mobile container, that is used or intended for the storage of bulk liquid or dry pesticide. It does not include a mobile container at a storage facility for less than fifteen days if this storage is incidental to the loading or unloading of a storage container at the bulk pesticide storage facility. Storage container does not include underground storage containers or surface impoundments such as lined ponds or pits.

(21) **"Substantially similar protection"** means alternative containment and management practices that prevent or control releases to the environment to the same or similar degree as the protections afforded by full compliance with this chapter.

(22) **"Temporary field storage"** means a storage container with the capacity to store two thousand five hundred gallons or less of bulk liquid pesticide that remains in the same location for no more than fourteen consecutive days in any six-month period. Provided, That temporary field storage containers used to store soil fumigants shall be allowed a maximum capacity of ten thousand gallons or less. Containers must be chemically compatible with the material, which is being stored. Such containers can remain in the same location for no more than fourteen consecutive days in any six-month period. Liquid bulk pesticide application tanks directly attached to an apparatus for the purpose of chemigation are exempt from this chapter.

(23) **"Washwater"** means the liquid generated from the rinsing of the exterior of any equipment, containers or secondary containment or operational areas which have or may have come in direct contact with any pesticide. (WSR 03-09-034, Effective May 9, 2003)

WAC 16-229-015 Penalties. Any person who fails to comply with any provisions of this chapter shall be subject to denial, suspension, or revocation of any license, registration, or permit provided for in chapters 15.58 and 17.21 RCW and/or imposition of a civil penalty as provided therein. (Order 5018, WSR 93-22-093, Effective March 1, 1994)

PART 2

PERMANENT STORAGE FACILITIES

WAC 16-229-020 Secondary containment of liquid bulk pesticides--General requirements. Primary storage of bulk liquid pesticides at a permanent storage facility

shall be located within secondary containment designed to prevent the release of discharged pesticides. Secondary containment shall consist of:

(1) A wall and liner with a sloped floor as provided in WAC 16-229-030 and 16-229-040; or

(2) A prefabricated facility as provided in WAC 16-229-050.

(3) Secondary containment in operation prior to March 1, 1994 which does not have sloped floors shall be exempt from this section: PROVIDED, That upon alteration to the secondary containment or increase of storage volume, the secondary containment shall be brought into full compliance with this section. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-025 Secondary containment of liquid bulk pesticides--Capacity.

(1) Secondary containment shall contain at least one hundred twenty-five percent of the volume of the largest storage container within the area plus the displacement of all other tanks, appurtenances, and other items within the containment area.

(2) If the secondary containment is located indoors or under a roof to prevent accumulation of rainfall, the area shall contain at least one hundred ten percent of the volume of the largest storage container plus the displacement of all other tanks, appurtenances and other items within the containment area.

(3) Secondary containment in operation prior to March 1, 1994, having a minimum capacity of one hundred ten percent of the volume of the largest storage container within the area plus the displacement of all other tanks, appurtenances and other items within the containment area shall be considered to be in compliance with this section: PROVIDED, That upon alteration to the containment or increase of storage container volume the secondary containment shall be brought into full compliance with the specific capacity requirements of this section. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-030 Secondary containment of liquid bulk pesticides—Walls and floors. (1) The secondary containment floor shall slope to one or more liquid tight collection points or sumps that allows spilled or deposited materials to be easily removed.

(2) The walls and floor of secondary containment shall be constructed of steel, poured reinforced concrete, precast concrete modules, solid masonry, or other materials or combination of materials that:

(a) Shall be designed to withstand a full hydrostatic head of any discharged liquid

(b) Shall have sufficient thickness and chemical resistance to contain a release until it is recovered.

(c) Shall be constructed and maintained to a permeability standard of 1×10^{-6} cm/sec as determined by ASTM test method D-5084 Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter or other test method approved by the department;

(d) Shall have sufficient structural strength to maintain the containment's integrity under normally anticipated loadings;

(e) Shall be chemically compatible with the materials being stored; and

(f) Shall be properly sealed to prevent leakage.

(3) Any piping through the outside walls of secondary containment shall be installed and maintained such that the structural integrity of the wall is preserved and in such a manner as to prevent leaks. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-040 Secondary containment of liquid bulk pesticides—Synthetic liners. (1) A synthetic liner may be used to meet the applicable standards set forth in WAC 16-229-030.

(2) Synthetic liners shall be chemically compatible with the materials being stored within the permanent storage facility and have a minimum thickness of 30 mils +/- 1 mil. A written confirmation of compatibility and a written estimate of the life of the liner from the manufacturer shall be kept on file at the permanent storage facility or the nearest local office from which the permanent storage facility is administered.

(3) Synthetic liners shall be installed under the supervision of a qualified representative of the manufacturer, a contractor certified by the manufacturer, or a certified engineer. All field constructed seams shall be tested, and repaired if necessary, in accordance with the manufacturers recommendations. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-050 Secondary containment of liquid bulk pesticides--Prefabricated facilities. (1) Prefabricated secondary containment shall be composed of a rigid prefabricated basin having both a base and walls constructed of steel or synthetic materials which are resistant to corrosion, puncture or cracking. Materials used in the secondary containment shall be chemically compatible with the products being stored within the secondary containment. A written confirmation of compatibility from the basin manufacturer shall be kept on file at the permanent storage facility or at the nearest local office from which the permanent storage facility is administered.

(2) The prefabricated secondary containment shall be designed and installed to withstand all foreseeable loading conditions, including the tank load and a full hydrostatic head of any discharged liquid. Multiple basins connected to provide the capacity required in WAC 16-229-025 shall be connected in a manner which assures an adequate transfer of discharged liquid between basins. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-060 Secondary containment of liquid bulk pesticides--Discharge outlets or valves. Secondary containment including prefabricated secondary containment, shall not have discharge outlets or valves. Discharge outlets or valves on

existing secondary containment shall be sealed. Secondary containments may be interconnected. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-070 Secondary containment of liquid bulk pesticides--Storage with other material. (1) No material may be stored within pesticide secondary containment unless the material is compatible with all other material stored within the secondary containment. For the purposes of this section, compatible means that the materials, when mixed together, will not react in a manner that will cause a human health or environmental hazard. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-080 Secondary containment of liquid bulk pesticides--Precipitation accumulations. Precipitation may not be allowed to accumulate in secondary containment to the point where it:

(1) Reduces the capacity of the secondary containment below one hundred ten percent of the volume of the largest storage container within the area plus the displacement of all other storage containers, appurtenances and other items within the containment area;

(2) Increases corrosion of storage containers or appurtenances; or

(3) Impairs the stability of storage containers. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-090 Secondary containment of liquid bulk pesticides--Recovery of discharges. Discharges within secondary containment shall be immediately recovered. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-100 Primary containment of bulk liquid pesticides--Permanent storage facility. Permanent storage facility general requirements:

(1) Storage containers and appurtenances shall be constructed, installed and maintained so as to prevent the discharge of liquid pesticide.

(2) Storage containers and appurtenances shall be constructed of materials which are resistant to corrosion, puncture or cracking.

(3) Materials used in the construction or repair of storage containers and appurtenances may not be of a type which react chemically or electrolytically with stored liquid pesticide in a way which may weaken the storage container or appurtenances, or create a risk of discharge.

(4) Metals used for valves, fittings and repairs on metal containers shall be compatible with the metals used in the construction of the storage container, so that the combination of metals does not cause or increase corrosion which may weaken the storage container or its appurtenances, or create a risk of discharge.

(5) Storage containers and appurtenances shall be designed to handle all operating stresses, taking into account static head, pressure build up from pumps and compressors, and any other mechanical stresses to which the storage containers and appurtenances may be subject in the foreseeable course of operations.

(6) Every pesticide storage container connection, except a safety relief valve connection, shall be equipped with a manual shut-off valve located on the storage container or at a distance from the storage container dictated by standard engineering practice.

(7) Appurtenances shall be adequately supported to prevent sagging and possible breakage because of gravity and other forces encountered in the ordinary course of operation.

(8) Pesticide storage containers and appurtenances shall be protected against reasonably foreseeable risks of damage by trucks and other moving vehicles or objects.

(9) Tanks designed as underground storage tanks shall not be used as above ground storage tanks for pesticide unless they are designed and approved for above ground use or have been inspected and approved by a certified engineer. A record of the inspection and approval shall be maintained as a permanent record. (Order 5018, WSR 93-22-093, Effective March 1, 1994)

WAC 16-229-110 Primary containment of bulk liquid pesticides--Prohibition against underground storage. No person shall store liquid bulk pesticide, pesticide spills or rinsates in an underground storage container or surface impoundment, such as a lined pond or pit. A watertight catch basin or sump used for the temporary collection of rinsate or runoff from transfer and loading areas is exempt from this section. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-120 Primary containment of bulk liquid pesticides--Abandoned storage containers. (1) Storage containers used at a permanent storage facility, or used for temporary field storage to hold liquid bulk pesticide or pesticide rinsate are considered abandoned if they have been out of service for more than six consecutive months because of a weakness or leak, or have been out of service for any reason for more than two years without an integrity test having been performed.

(2) Abandoned underground storage containers containing pesticides which meet the definition of hazardous substance underground storage tank system in chapter 173-360 WAC are subject to the applicable requirements in that chapter.

(3) Abandoned above ground storage containers shall be thoroughly cleaned. All hatches on the storage containers shall be secured and all valves or connections shall be severed or plugged with vents being left functional.

(4) Abandoned above ground storage containers shall be posted with a clearly legible tag with the words "Out of Service."

(5) Abandoned storage containers shall not be allowed to be put back in service on the same site without first installing secondary containment protection. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-130 Primary containment of bulk liquid pesticides--Anchoring of storage containers. Storage containers shall be secured, if necessary, to prevent flotation or instability which might occur as a result of liquid accumulations within a secondary containment facility. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-140 Primary containment of bulk liquid pesticides--Filling storage containers. Storage containers may not be filled beyond the capacity for which they are designed, taking into account the density of the liquid being stored and thermal expansion during storage. (Order 5018, WSR 93-22-093, Effective March 1, 1994)

WAC 16-229-150 Primary containment of bulk liquid pesticides--Liquid level gauging device. (1) Every storage container shall be equipped with a liquid level gauging device by which the level of liquid in the storage container can be readily and safely determined.

(2) A liquid level gauging device is not required if the level of liquid in a storage container can be reliably measured by other means.

(3) Liquid level gauging devices shall be secured, in a safe manner, to protect against breakage or vandalism which may result in a discharge.

(4) External sight gauges are prohibited unless they are equipped with an automatic shut-off valve. (Order 5018, WSR 93-22-093, Effective March 1, 1994)

WAC 16-229-160 Primary containment of bulk liquid pesticides--Venting requirements. Storage containers used for liquid bulk pesticide shall be equipped with a conservation vent which opens and closes within the designed pressure limits of the container. (Order 5018, WSR 93-22-093, Effective March 1, 1994)

WAC 16-229-170 Primary containment of bulk liquid pesticides--Security. All bulk pesticide storage containers and appurtenances shall be fenced or otherwise secured to provide reasonable protection against vandalism or unauthorized access. Valves on storage containers shall be closed and locked or otherwise secured when left unattended. Locks on end valves shall be considered adequate security for containers and appurtenances. For purposes of this section, unattended means there is no employee on the property for a period of twelve hours or longer. (Order 5018, WSR 93-22-093, Effective March 1, 1994)

WAC 16-229-180 Primary containment of bulk pesticides--Labeling. (1) All bulk pesticide storage containers shall be labeled in accordance with the Washington Pesticide Control Act (chapter 15.58 RCW) and the Federal Insecticide, Fungicide and Rodenticide Act. The registered product label shall be attached to the bulk storage container in a prominent location. The label shall be designed to remain intact and legible through active use of the container.

(2) All bulk pesticide storage containers shall bear a label or placard in accordance with Uniform Fire Code Standard No. 79-3, identifying the materials therein.

(3) All bulk pesticide storage containers used for field storage shall be labeled with the owner's name, the capacity of the tank, and an identifying number. Lettering shall be a minimum of two inches in height and in a color contrasting to the background.

(4) All bulk pesticide storage containers used for temporary field storage shall have attached, in a weather-proof enclosure, a record of the date the storage container was put in place. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-200 Primary containment of bulk liquid pesticides—Temporary field storage. (1) Containers used for temporary field storage of liquid bulk pesticide shall comply with the following sections: WAC 16-229-100, 16-229-110, 16-229-120, 16-229-140, 16-229-150, 16-229-160, and 16-229-180.

(2) All bulk pesticide storage containers and appurtenances used for field storage shall be inspected for leakage and soundness daily when in use.

(3) Valves on storage containers shall be closed and locked or otherwise secured when left unattended.

(4) The physical location and identifying number of all temporary field storage shall be provided to the department upon request.

(5) The department may issue a permit to extend the time temporary field storage may be in one place during any six-month period due to weather related conditions upon written request. No advisory group review, pursuant to WAC 16-229-310(2) is required for this type of permit. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-210 Operational area containment of liquid pesticides--Permanent storage facility. (1) All operational area activities shall take place on or within operational area containment: PROVIDED, That during the unloading or loading of railcars, marine vessels, or manned trucks when product is unloaded from direct shipments from manufacturers, individual basins or portable storage containers shall be used to recover spillage and leakage from transfer connections and pumps.

(2) Operational area containment shall be designed and constructed to contain pesticides, rinsates, washwater and other materials spilled or deposited during mixing, loading, unloading, draining, and rinsing activities.

(3) The walls and floor of operational area containment shall be constructed of steel, poured reinforced concrete, precast concrete modules, solid masonry, or other materials or combination of materials that:

(a) Are designed to withstand a full hydrostatic head of any discharged liquid;
(b) Have sufficient thickness and chemical resistance to contain a release until it is recovered.

(c) Are constructed and maintained to a permeability standard of 1×10^{-6} cm/sec as determined by ASTM test method D-5084 Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter or other test method approved by the department.

(4) If synthetic materials are used in construction they shall be chemically compatible with the products handled at the site. A written confirmation of compatibility from the manufacturer shall be kept on file at the site or the nearest location from which the site is administered.

(5) Operational area containment shall be constructed to withstand the weight of any vehicles or storage containers which will be on it.

(6) Operational area containment shall be constructed with sufficient surface area, using curbs or other means, to prevent any discharge from leaving the containment area.

(7) Operational area containment shall have a capacity of at least fifteen hundred gallons of containment. If no storage container or mobile storage container used at the operational area containment to transfer liquid bulk pesticides has a capacity of more than one thousand gallons, the operational area containment shall be of adequate size and design to contain one hundred twenty-five percent the capacity of the largest storage container, or mobile storage container used.

(8) Operational area containment shall slope to one or more liquid tight collection points or sumps that allows spilled or deposited materials to be easily recovered. An above ground storage container may be used in conjunction with the operational area containment to meet the capacity requirement. If an above ground storage container is used for temporary storage the storage container shall be located within secondary containment. The storage container shall be clearly and conspicuously labeled "pesticide rinsate" followed by the major category of pesticide such as insecticide, herbicide, fungicide.

(9) Any pump used for recovering material from the operational area containment shall be manually activated.

(10) The operational area containment shall not have a discharge outlet or valve. Discharge outlets or valves on existing operational areas shall be sealed. Operational area containments may be interconnected. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-220 Operational area containment of liquid pesticides—
Temporary field storage. (1) During loading and unloading of liquid bulk pesticide at temporary field storage locations individual basins or portable storage containers shall be used to recover spillage and leakage from transfer connections and pumps.

(2) Liquid bulk pesticide storage containers used for temporary field storage shall be located at least one hundred feet from wells and surface water, except, for purposes of this section, irrigation water flowing directly to a field, or on a field, is not considered surface water unless the water could be carried beyond the field being irrigated. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-230 Dry bulk pesticide storage and handling. (1) Dry bulk pesticides shall be stored in storage containers designed and constructed to hold dry bulk pesticide and shall be compatible with the stored pesticide. Storage containers shall be constructed of materials which are resistant to corrosion, puncture or cracking and shall be properly maintained.

(2) Dry bulk pesticide storage containers shall be placed on pallets or a raised platform which is drained.

(3) Stored dry bulk pesticide shall be covered by a roof or tarpaulin except during loading or unloading operations.

(4) All loading, unloading, mixing and handling of dry bulk pesticide at the storage facility shall be done on a paved surface of a size and design that will contain the pesticide and allow for collection of spilled materials.

(5) Any spills of dry bulk pesticide onto the containment area shall be promptly cleaned up and recovered. (Order 5018, WSR 93-22-093, Effective March 1, 1994)

WAC 16-229-240 Backflow prevention. (1) When piping within secondary containment or an operational area is directly connected to a water source such as a well or public water system, an approved air gap or an approved reduced pressure principle backflow prevention assembly (RPBA) shall be installed to protect the water source. Approved air gaps and approved RPBA's shall be installed, operated, inspected and/or tested and maintained as per WAC 246-290-490.

(2) Approved RPBA's shall be inspected and tested by a Washington state department of health certified backflow assembly tester, and approved air gaps shall be inspected by a Washington state department of health certified backflow assembly tester or cross-connection control specialist:

(a) At the time of installation, alteration or relocation, and at least on an annual schedule thereafter. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-250 Rinsate management. (1) Pesticide products, or rinsates spilled, or accumulated within a secondary or operational area facility, shall be immediately recovered. Any use of these materials shall be at labeled rates consistent with labeled end uses for the product(s). The materials may be stored for later use or as make-up water for pesticide applications.

(2) Any liquid that accumulates at a collection point or in a sump shall be removed within twenty-four hours when the facility is in operation.

(3) Recovered spills, sedimentation, rinsates, contaminated precipitation or other contaminated debris shall be contained and used per product label or properly disposed of. Pesticide containing materials shall not be released to the environment unless the release is an application per product label direction. Any disposal of these materials or captured washwater shall be consistent with the Hazardous Waste Management Act, chapter 70.105 RCW and the Water Pollution Control Act, chapter 90.48 RCW and shall be enforced by the Washington state department of ecology accordingly.

(4) If storage tanks are used to store rinsate, washwater or contaminated precipitation for later use the following records shall be kept.

(a) The date and amount of water put into the tank.

(b) The brand name(s) or active ingredient(s) of the pesticides contained in the water.

(c) A method to identify the specific application(s) it was used for. (Order 5018, WSR 93-22-093, Effective March 1, 1994)

WAC 16-229-260 Maintenance and inspection. (1) The operator of a pesticide bulk storage facility shall inspect and maintain storage containers, appurtenances, secondary containment and operational area containment to minimize the risk of a pesticide release. The inspection shall include a visual observation for any evidence of leaks, spills, cracks, solar decay or wear.

(2) Maintenance of the pesticide bulk storage facilities shall be performed as needed to ensure that the integrity of the bulk pesticide storage containers, secondary containment and operational area containment is maintained.

(3) Bulk pesticide storage containers and appurtenances shall be inspected at least once per month when in use. Secondary containment and operational area containment shall be inspected at least once per month when in use.

(4) All secondary and operational area containment shall be maintained free of debris and foreign matter.

(5) A written record of all inspections and maintenance shall be made on the day of the inspection or maintenance and kept at the storage site or at the nearest local office from which the storage site is administered.

(6) Inspection records shall contain the name of the person making the inspection, the date of the inspection, conditions noted and maintenance performed. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-270 Recordkeeping requirements. The following records shall be maintained at permanent storage facilities or at the nearest local office from which the permanent storage facility is administered:

(1) A record of construction materials and methods of construction to show compliance with WAC 16-229-025, 16-229-030, 16-229-040, 16-229-050, 16-229-060, and 16-229-210. These records shall be maintained as permanent records.

(2) A record of the method(s) used to use or dispose of product or contaminated materials recovered from discharges outside secondary or operational area containment. This record applies only to discharges required to be reported to the Washington state department of ecology by the Washington state dangerous waste regulations, chapter 173-303 WAC. These records shall be maintained for a period of at least three years.

(3) A monthly inventory reconciliation showing the amount of liquid bulk pesticide from each storage container which is lost or unaccounted for at the end of each monthly period during which pesticide is stored in the container. These records shall be maintained for a period of at least three years.

(4) Inspection and maintenance records required by WAC 16-229-260. These records shall be maintained for a period of at least three years.

(5) Manufacturer's compatibility statements required by WAC 16-229-040 and 16-229-050. These records shall be maintained as permanent records.

(6) A copy of the facility's spill response plan required by WAC 16-229-280. This record shall be maintained as a permanent document.

(7) Records required in WAC 16-229-250 for use or disposal of rinsate, washwater and contaminated precipitation. These records shall be maintained for a period of at least three years.

(8) Inspection records required by WAC 16-229-100(9). These records shall be maintained as permanent records.

(9) Records required by WAC 16-229-240, backflow prevention. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-280 Spill response plan. (1) The operator of a permanent storage facility shall prepare a written spill response plan for the permanent storage facility. If all or portions of the information required by the spill response plan have been prepared for plans required by other government agencies, they need not be prepared for this plan: PROVIDED, That the information is readily accessible to emergency responders and department personnel. However, when copies of the plan are distributed all the required information must be provided.

The plan shall include the following elements:

(a) The identity and telephone numbers of the persons and agencies who are to be contacted in the event of a spill including persons responsible for the stored pesticide.

(b) For each pesticide stored at the permanent storage facility a complete copy of the storage container labeling required in WAC 16-229-180 and the labeling required to accompany sale of the pesticide under the Washington Pesticide Control Act, chapter 15.58 RCW.

(c) A material safety data sheet for each pesticide stored at the permanent storage facility.

(d) The procedures to be used for controlling and recovering, or otherwise responding to a spill for each type of bulk pesticide stored at the permanent storage facility.

(e) The procedures to be followed in using or disposing of a recovered spill.

(2) The spill response plan shall be kept current at all times.

(3) A copy of the spill response plan shall be kept readily available for inspection and use at the permanent storage facility or at the nearest local office from which the storage facility is administered and shall be available for inspection and copying by the department.

(4) A copy of the spill response plan shall be provided to the local fire department.

(5) Persons employed at permanent storage facilities shall be trained in spill response procedures pursuant to the spill response plan.

(6) Emergency equipment and supplies: Every permanent storage facility shall have access to pumps and recovery containers which can be used to control and recover spills. Pumps, recovery containers and persons capable of deploying and operating them shall be readily available in an emergency. Pumps and recovery containers may include those operated by a local fire department or other persons: PROVIDED, That the use and availability of the pumps and recovery containers is arranged in advance as part of the spill response plan. Absorbent materials and other equipment suitable for the control and cleanup of smaller spills shall be available at the storage facility. The permanent storage facility shall maintain a list showing the types and locations of clean-up supplies and equipment. The list shall be maintained at the permanent storage facility or the nearest local office from which the facility is administered. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-310 Permits. (1) The department may issue a permit exempting any person from a requirement under Part 2 of this chapter if compliance is not technically feasible in the judgment of the department and the department finds that alternative measures provide substantially similar protection. All information required to prove that substantially similar protection is possible shall be provided to the department by the person requesting the permit.

(2) At the request of the department, advisory group, or permittee an advisory group appointed by the director shall evaluate and advise the department on any requests for permits from the rule. (WSR 00-23-074, Effective December 18, 2000)

PART 3

PERMANENT MIXING/LOADING SITES

WAC 16-229-400 Operational area containment at permanent mixing/loading sites. (1) All operational area activities shall take place on or within operational area containment.

(2) Operational area containment shall be designed and constructed to contain pesticides, rinsates, washwater and other materials spilled or deposited during mixing, loading, unloading, draining, and rinsing and washing activities.

(3) The walls and floor of operational area containment shall be constructed of steel, poured reinforced concrete, precast concrete modules, solid masonry, or other materials or combination of materials that:

(a) Are designed to withstand a full hydrostatic head of any discharged liquid;

(b) Have sufficient thickness and chemical resistance to contain a release until it is recovered.

(c) Are constructed and maintained to a permeability standard of 1×10^{-6} cm/sec as determined by ASTM test method D-5084 Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter or other test method approved by the department.

(4) If synthetic materials are used in construction they shall be chemically compatible with the products handled at the site. A written confirmation of compatibility from the manufacturer shall be kept on file at the site or the nearest location from which the site is administered.

(5) Operational area containment shall be constructed to withstand the weight of any vehicles or storage containers which will be on it.

(6) Operational area containment shall be constructed with sufficient surface area, using curbs or other means, to prevent any discharge from leaving the containment area.

(7) Operational area containment shall be of adequate size and design to contain one hundred twenty-five percent the capacity of the largest storage container, or application equipment used at the facility up to a maximum of fifteen hundred gallons.

(8) Operational area containment constructed prior to March 1, 1994, and which have been constructed to contain one hundred ten percent of the capacity of the largest storage container or application equipment used at the facility shall be considered to be in compliance with this chapter.

(9) Operational area containment shall slope to one or more liquid tight collection points or sumps that allows spilled or deposited materials to be easily recovered. An above ground storage container may be used in conjunction with the operational area containment to meet the capacity requirement. If an above ground storage container(s) are used for temporary storage, the storage containers shall be located within operational area or secondary containment. The storage container shall be clearly and conspicuously labeled "pesticide rinsate" followed by the major category of pesticide such as insecticide, herbicide, fungicide.

(10) Any pump used for recovering material from the operational area containment shall be manually activated.

(11) The operational area containment shall not have a discharge outlet or valve. Discharge outlets or valves on existing operational areas shall be sealed. Operational area containments may be interconnected. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-410 Backflow prevention. (1) When piping within a permanent mixing/loading site is directly connected to a water source such as a well or public water system, an approved air gap or an approved reduced pressure principle backflow prevention assembly (RPBA) shall be installed to protect the water source. Approved air gaps and approved RPBA's shall be installed, operated, inspected and/or tested and maintained per WAC 246-290-490.

(2) Approved RPBA's shall be inspected and tested once per year by a Washington state department of health certified backflow assembly tester, and approved air gaps shall be inspected by a Washington state department of health certified backflow assembly tester or cross-connection control specialist:

(a) At the time of installation, alteration or relocation, and at least on an annual schedule thereafter. (WSR 00-23-074, Effective December 18, 2000)

WAC 16-229-420 Rinsate management. (1) Pesticide products or rinsates spilled or accumulated within an operational area containment facility shall be immediately recovered. Any use of these materials must be at labeled rates consistent with labeled end uses for the product(s). The materials may be stored for later use or as make-up water for pesticide applications.

(2) Any liquid that accumulates at a collection point or in a sump shall be removed within twenty-four hours when the facility is in operation.

(3) Recovered spills, sedimentation, rinsates, contaminated precipitation or other contaminated debris shall be contained and used per product label or properly disposed of. Pesticide containing materials shall not be released to the environment unless the release is an application per product label direction. Any disposal of these materials or captured washwater shall be consistent with the Hazardous Waste Management Act, chapter 70.105 RCW and the Water Pollution Control Act, chapter 90.48 RCW and shall be enforced by the Washington state department of ecology accordingly.

(4) If storage tanks are used to store rinsate, washwater, or contaminated precipitation for later use the following records shall be kept.

(a) The date and amount of water put into the tank.

(b) The brand name(s) or active ingredient(s) of the pesticides contained in the water.

(c) A method to identify the specific application it was used for. (Order 5018, WSR 93-22-093, Effective March 1, 1994)

WAC 16-229-430 Maintenance and inspection. (1) The operator of a permanent mixing/loading site shall inspect and maintain storage containers, appurtenances, and operational area facilities to minimize the risk of a pesticide release. The inspection shall include a visual observation for any evidence of leaks, spills, cracks, solar decay or wear.

(2) Maintenance of the facilities shall be performed as needed to ensure that the integrity of the operational area containment facilities is maintained.

(3) Operational area facilities shall be inspected at least once per month when in use.

(4) Operational area facilities shall be maintained free of debris and foreign matter.

(5) A written record of all inspections and maintenance or repairs shall be made on the day of the inspection or maintenance and kept at the site or at the nearest local office from which the site is administered.

(6) Inspection records shall contain the name of the person making the inspection, the date of the inspection, conditions noted and maintenance performed.

(7) Records required by WAC 16-201-410, backflow prevention. (Order 5018, WSR 93-22-093, Effective March 1, 1994)

WAC 16-229-440 Recordkeeping requirements. The following records shall be maintained at the permanent mixing/loading site or at the nearest local office from which the site is administered: (1) A record of construction materials and methods of construction to show compliance with WAC 16-229-400. These records shall be maintained as permanent records.

(2) A record of the method(s) used to use or dispose of product or contaminated materials recovered from discharges outside the operational area containment facility. This record applies only to discharges required to be reported to the Washington state department of ecology by the Washington state dangerous waste regulations, chapter 173-303 WAC. These records shall be maintained for a period of at least three years.

(3) Inspection and maintenance records required by WAC 16-229-430. These records shall be maintained for a period of at least three years.

(4) Manufacturer's compatibility statements required by WAC 16-229-400 if synthetic materials are used in the construction of the facility. These records shall be maintained as permanent records.

(5) A copy of the spill response plan required in WAC 16-229-450. This record shall be maintained as a permanent document.

(6) Records required by WAC 16-229-420 for use or disposal of rinsate and contaminated precipitation. These records shall be maintained for a period of at least three years. (Order 5018, WSR 93-22-093, Effective March 1, 1994)

WAC 16-229-450 Spill response plan. (1) The operator of a permanent mixing/loading site shall prepare a written spill response plan for the facility. If all or portions of the information required by the spill response plan have been prepared for plans required by other government agencies they need not be prepared for this plan: PROVIDED, That the information is readily accessible to emergency responders and department personnel. However, when copies of the plan are distributed all the required information shall be provided.

The plan shall include the following elements:

(a) The identity and telephone numbers of the persons and agencies who are to be contacted in the event of a spill.

(b) For each pesticide stored at the facility a complete copy of the storage container labeling required under this rule and the labeling required to accompany sale of the pesticide under the Washington Pesticide Control Act, chapter 15.58 RCW.

(c) A material safety data sheet for each pesticide stored at the facility.

(d) The procedures to be used for controlling and recovering, or otherwise responding to a spill for each type of pesticide stored at the facility.

(e) The procedures to be followed in using or disposing of a recovered spill.

(2) The spill response plan shall be kept current at all times.

(3) A copy of the spill response plan shall be kept readily available for inspection and use at the facility or at the nearest local office from which the facility is administered and shall be available for inspection and copying by the department.

(4) Persons employed at permanent mixing/loading sites shall be trained in spill response procedures pursuant to the spill response plan.

(5) Emergency equipment and supplies: Absorbent materials and other equipment suitable for the control and cleanup of smaller spills shall be available at the facility. A list showing the types and locations of clean-up supplies and equipment shall be maintained at the permanent mixing/loading site or the nearest local office from which the site is administered. (Order 5018, WSR 93-22-093, Effective March 1, 1994)

WAC 16-229-480 Permits. (1) The department may issue a permit exempting any person from a requirement under Part 3 of this chapter if compliance is not technically feasible in the judgment of the department and the department finds that alternative measures provide substantially similar protection. All information required to prove that substantially similar protection is possible shall be provided to the department by the person requesting the permit.

(2) At the request of the department, advisory group, or permittee an advisory group appointed by the director shall evaluate and advise the department on any requests for permits from this chapter. (WSR 00-23-074, Effective December 18, 2000)

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 16-229-300 Compliance schedule

WAC 16-229-470 Compliance

(WSR 00-23-074, Effective December 18, 2000)

Revised 5/9/03